

## Abstract

A method is disclosed for creating and using an extendable class-based shared data-type in object oriented programming to overcome versioning problems between interconnected devices. An extensible object class is created by defining a data-type having a base class, a type identifier, and a space reserved for additional properties. The base classes are known by all devices in the original version. New classes are added by using an existing base class and adding additional attributes to the additional properties portion of the new data-type. The type identifier is a unique number or string that identifies the data-type and certain information regarding the base class. An older version of a device that receives a new data-type from a newer device can determine the base class properties of the new data-type by reference to a catalog. Based on this base class information, the older version of a client or server can process the new data-type. Even if the older version cannot accommodate the new attributes, recognition of the base classes ensures that the device will not halt the transfer of information and that it will process the data-type to the extent that it recognizes its properties.